ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

THE DEPENDENT RESURVEY OF

A PORTION OF THE SUBDIVISIONAL LINES

AND

THE SUBDIVISION OF SECTION 12

TOWNSHIP 28 NORTH, RANGE 8 EAST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Fabian Yazzie, Cadastral Surveyor

Under Special Instructions dated April 7, 2016, approved April 7, 2016, which provided for the surveys included under Group No. 1157, and assignment instructions dated April 7, 2016.

Survey commenced April 25, 2016

Survey completed May 3, 2016

INDEX DIAGRAM

TOWNSHIP 28 NORTH RANGE 8 EAST GILA & SALT RIVER MERIDIAN, ARIZONA

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T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona

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The following field notes describe the dependent resurvey of a portion of the subdivisional lines and the subdivision of Section 12, Township 28 North, Range 8 East, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

The survey of the Second Guide Meridian East, through Townships 26, 27, 28, 29, 30, 31, and 32 North, and the Third Guide Meridian East (north two miles) through Township 32 North, between Ranges 12 and 13 East, were surveyed by Phillip Contzen, United States Deputy Surveyor, in 1905.

The retracement of the Seventh Standard Parallel North, through part of Range 8 East, and the Second Guide Meridian East, through Township 28 North, and the survey of the Seventh Standard Parallel North, through part of Range 8 East, and subdivision lines of Township 28 North, Range 8 East, Gila and Salt River Meridian, were surveyed by Theodore O. Johnston, U.S. Surveyor, and Phillip L. Inch, U.S. Transitman, in 1916.

The dependent resurvey of the Second Guide Meridian East (west boundary), the South and East boundaries, and the subdivisional lines of Township 28 North, Range 9 East, Gila and Salt River Meridian, were surveyed by Craig S. Dukart, Cadastral Surveyor, in 2009.

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Surveying Instructions</u>, (2009), and the Special Instructions dated April 7, 2016, for Group Number 1157, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation R8 model receivers.

Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) AI8820 FERN FERNO MESA CORS, DL1882 AZFL NAU FLAGSTAFF CORS, AI8805 FRED FREDONIA CORS, and DK8419 AZPG CITY OF PAGE CORS. The NAD 83 (2011) (EPOCH: 2010), geographic position of the following two corners are as follows:

T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona

CHAINS

The corner of sections 1, 6, 7, and 12.

Latitude: 35°49'47.281" N. Longitude: 111°29'00.180" W.

The corner of sections 11, 12, 13, and 14.

Latitude: 35°48'54.903" N. Longitude: 111°30'04.240" W.

The mean magnetic declination is 10 3/4° E.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona

Restoring the survey executed by T.O. Johnston and P.L. Inch, in 1916

Beginning at the cor. of secs. 7, 12, 13, and 18, on the E. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above the ground, with a mound of stone, 2 1/2 ft. base, 1 1/2 ft. high, W. of cor., with brass cap mkd. T28N R8E R9E S12 S7 S13 S18 2009. Add the marks 2016 to the brass cap.

S. 89°47' W., bet. secs. 12 and 13.

Over broken and rolling land.

- 25.35 Top edge of cliff, 180 ft. high, bears N. 30° E. and S. 30° W.
- 34.20 Foot of mesa slope, bears N. 25° E. and S. 25° W.
- Point accepted for the 1/4 sec. cor. of secs. 12 and 13, occupied with a limestone, 7 x 5 ins., firmly set, projecting 6 ins. above the ground, with remains of a mound of stone, 3 ft. base, 6 ins. high, N. of cor., mkd. 1/4 12 on N. face. This position was originally an iron pipe, with a mound of stone to the N. This position fits reasonably with the topographic distance to the E. The cor. is accepted as a careful and faithful perpetuation by persons unknown, of the original cor. position.

At the cor. point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona

	T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona					
CHAINS						
	T 28 N R 8 E					
	S 12					
	1/4 —— S 13					
	5 13					
	2016					
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.					
	Deposit the limestone monument, 15 1/2 ins. long, alongside the stainless steel post.					
	Rebuild mound of stone, 3 ft. base, 2 ft. high, N. of cor.					
	Set a steel fence post E. of cor.					
	From this cor. point, the center of a cylindrical stone structure, 23 ft. diam., 4 ft. high, bears N. 62°05' W., 14.06 chs. dist.					
	S. 89°47' W., beginning new measurement.					
	Over gently rolling terrain.					
32.05	Tappan Wash, 10 ft. wide, 4 ft. deep, drains N. 55° W.					
40.80	The cor. of secs. 11, 12, 13, and 14, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 15 ins. above the ground, with remnants of a mound of stone, W. of cor., with brass cap mkd. T28N R8E S11 S12 S14 S13 1916. Add the marks 2016 to the brass cap.					
	Set a steel fence post in the center of the rebuilt mound of stone, 3 ft. base, 2 ft. high, W. of cor.					
	N. 0°04' E., bet. secs. 11 and 12.					
	Over gently rolling terrain.					
33.20	Moenkopi-El Dorado high voltage transmission line, bears N. 80° E. and S. 80° W.					
35.00	Two track road, bears N. 80° E. and S. 85° W.					
39.99	The 1/4 sec. cor. of secs. 11 and 12, monumented with an iron post, 1 in. diam., firmly set, projecting 18 ins. above the ground, with a mound of stone, 2 ft. base, 3 ft. high, NW of cor., mkd. 1/4 S11 S12 1916. Add the marks T28N R8E 2016 to the brass cap.					
	Build a collar of stone, 2 1/2 ft. base, 1 ft. high, around iron post.					

Dependent Resurvey of a Portion of the Subdivisional Lines,

L	T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona
CHAINS	
	N. 0°10' E., beginning new measurement.
	Over rolling terrain.
39.97	The cor. of secs. 1, 2, 11, and 12, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 18 ins. above the ground, with a mound of stone, 2 ft. base, 1 ft. high, W. of cor., mkd. T28N R8E S2 S1 S11 S12 1916. Add the marks 2016 to the brass cap.
	Build a collar of stone, 2 ft. base, 1 1/2 ft. high, around iron post, and rebuild mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	From the cor. of secs. 1, 6, 7, and 12, on the E. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, flush in a collar of stone, 4 ft. base, 1/2 ft. high, with brass cap mkd. T28N R8E R9E S1 S6 S12 S7 2009. Add the marks 2016 to the brass cap.
-	S. 89°52' W., bet. secs. 1 and 12.
	Over rolling land.
20.10	Two track road, bears N. 30° E. and S. 30° W.
39.87	The 1/4 sec. cor. of secs. 1 and 12, monumented with an iron post, 1 in. diam., firmly set, projecting 21 ins. above the ground, in an embedded collar of stone, 2 ft. base, mkd. 1/4 S1 S12 1916. Add the marks T28N R8E 2016 to the brass cap.
	Build a mound of stone, 2 1/2 ft. base, 1 1/2 ft. high, around iron post.
	S. 89°41' W., beginning new measurement.
	Over rolling terrain.
39.91	The cor. of secs. 1, 2, 11, and 12.
	Subdivision of Section 12, T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona
	From the 1/4 sec. cor. of secs. 12 and 13.
	N. 0°31' W., on the N. and S. center line of sec. 12.
	Over gently rolling land.
25.60	Tappan Wash, 30 ft. wide, 5 ft. deep, drains S. 75° E.

Subdivision of Section 12,

CHAINS	T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona				
36.45	Top of sandstone rim, 40 ft. high, bears N. 45° E. and S. 75° W.				
40.01	Point for the center 1/4 sec. cor. of sec. 12, at intersection with the E. and W. center line sec. 12.				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in solid sandstone bedrock, with brass cap mkd.				
	T 28 N R 8 E C 1/4 S 12				
	2016				
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.				
	Set a steel fence post in a drill hole, N. of cor., in a mound of stone, 3 ft. base, 2 ft. high, around iron post.				
	Cor. is located 1 ch. W. of sandstone rim, 40 ft. high, bears E. and N. 60° W., and is located underneath the Moenkopi-El Dorado high voltage transmission line, bears N. 80° E. and S. 80° W.				
	From this cor. point, the NE cement footing of the Moenkopi-El Dorado high voltage transmission line tower, 28 x 28 ft. base, bears S. 82°22' W., 2.09 chs. dist.				
55.20	Two track road, bears N. 60° E. and S. 60° W.				
80.02	The 1/4 sec. cor. of secs. 1 and 12.				
	From the 1/4 sec. cor. of secs. 7 and 12, on the E. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, flush in a mound of stone, 5 ft. base, 1 1/2 ft. high, with brass cap mkd. T28N R8E R9E 1/4 S12 S7 2009. Add the marks 2016 to the brass cap.				
	Cor. is located 1.60 chs. E. of top cliff edge, 40 ft. high, bears N. 70° E. and S. 60° W.				
	S. 89°45' W., on the E. and W. center line of sec. 12.				
	Gently ascending crest of mesa top.				
28.90	Tappan Wash, 30 ft. wide, 5 ft. deep, drains N. 70° E.				
39.48	The center 1/4 sec. cor. of sec. 12.				
66.0	From this point, the NE cement footing of the Moenkopi-El Dorado high voltage transmission line tower, 33 x 33 ft. base, bears S., 4.25 chs. dist.				
68.25	Two track road, bears N. 60° E. and S. 60° W.				
79.87	The 1/4 sec. cor. of secs. 11 and 12.				

Subdivision of Section 12, T. 28 N., R. 8 E., Gila and Salt River Meridian, Arizona

CHAINS

GENERAL DESCRIPTION

The area surveyed is within the Navajo Indian Reservation and is approximately 5 miles southwest of Cameron, Arizona and 5 miles northwest of Gray Mountain, Arizona. Primary access is provided by a two track road accessed from U.S. Highway 64. The two track road runs through the north half of section 12, exiting near the northwestern portion of the southwest quarter of section 12. A series of trail roads provide access throughout the section. ATV's were used extensively.

Tappan Wash cuts through the southwest quarter of section 12 and through a portion of the southeast quarter of section 12. The elevation varies from 4560 to 4800 feet above sea level. The terrain is gently rolling with some hilltops in the valley of Tappan Wash, and is rugged and broken in the eastern portion of section 12. The vegetation is sparse rabbit brush, black brush, Mormon tea, and native grasses. The soil is mostly sand over sandstone and limestone, with areas of sandstone and limestone outcrops. There is one old stone structure and an unmaintained fenced corral nearby, located within the southwest quarter of section 12. There are three old stone structures located in the northeast quarter of section 12. All stone structures are uninhabited, and there is no housing within section 12.

The mean magnetic declination of 10 3/4° E. was derived from the National Oceanic and Atmospheric Administration, online magnetic field calculator for the date of survey.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Charles E. Besancon III	Surveying Technician
Daniel R. Bryan	Engineering Technician
Kevin N. Tso	Engineering Technician
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CERTIFICATE OF SURVEY

I, Fabian Yazzie, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 7th day of April, 2016, I have dependently resurveyed a portion of the subdivisional lines, and the subdivision of section 12, T. 28 N., R. 8 E., of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Surveying Instructions, (2009), and in specific manner described in the foregoing field notes.

the foregoing field notes.	
1/3/2017 (Date)	(Cadastrali (Surveyor)
CE	RTIFICATE OF APPROVAL
	BUREAU OF LAND MANAGEMENT Phoenix, Arizona
subdivisional lines, and the Gila and Salt River Meridian	f the dependent resurvey of a portion of the subdivision of section 12, T. 28 N., R. 8 E., n, in the State of Arizona, executed by Fabian having been critically examined and found
1/24/2017 (Date)	(Chief Cadastral Surveyor of Arizona)
CER	TTETCATE OF TRANSCRIPT
Can	TIL TOTAL OF THURSCRIFT
I CERTIFY that the foregoin described surveys in T. 36 Arizona, is a true copy of the	g transcript of the field notes of the above N., R. 7 E., Gila and Salt River Meridian, e original field notes.

(Chief Cadastral Surveyor of Arizona)